

Razor Clam (*Solen* spp.) Fishery in Sarawak, Malaysia

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Abstract

Razor clams (*Solen* spp.), locally known as ‘ambal’, are highly priced marine bivalves in Sarawak and are harvested for human consumption mainly from the mudflats of Kuching and Samarahan Division. This paper reports on the state and current razor clam fishery practices in major areas and on the impact on natural resources. The supply of this clam is drawn mainly from wild catch leading to indiscriminate harvesting resulting in the depletion of natural stocks. Some comparison of razor clam fishery as between the western part of Sarawak, and Ehime Prefecture, Japan also will be discussed. The shell length data from clams collected in major razor clamming sites during peak clamming season in several consecutive years when analyzed showed a deterioration of the resources. We would like to highlight the impacts of some current practices which can create problems for razor clam fisheries that depend fully on natural stocks, to make suggestions on how the local community can conduct sustainable management of razor clams in Sarawak. The achievements and challenges faced in razor clam research regarding establishing seed production will also be highlighted.

Key words: Ehime Prefecture, razor clam, Solenidae, Sarawak, sustainable management

1. Introduction

Razor clams, locally known as “ambal”, are one of the main species of economically important bivalves collected from mudflats in the western part of Sarawak. This bivalve has a pair of elongated thin shells which are nearly straight and sub-cylindrical with parallel margins and terminal beaks and they are gaping at both ends. It has a large and powerful foot that is particularly useful as a feeding and burrowing mechanism. As currently classified, Sarawak razor clams fall under the Family Solenidae which comprises three different species namely: *Solen regularis* Dunker 1962, *S. lamarckii* Deshayes 1839 and *S. sarawakensis* Cosel 2002 (Hung and Ruhana, 2007). Among these three, *S. regularis* is the most dominant (Rahim and Tan, 2008) and is preferred by consumers due to its meat’s softer texture.

The last report on Sarawak razor clams fishery was published 16 years ago by Pang (1994). Therefore, there is a need to understand the current status of the razor clam population, and to gather ecological and biological information which is crucial for sustainable management and future stock enhancement. At the end of 2005 a comprehensive study on natural stock of the Solenidae razor clam natural stock in the western part of Sarawak

was started by a team of researchers from the Universiti Malaysia Sarawak (UNIMAS). This paper explains the present status of Solenidae razor clam fishery during the razor clamming seasons from 2005 to 2009 and the impacts on natural resources. A brief note on Solenidae razor clams in Japan is included based on the author’s experience in Ehime Prefecture. Some recommendations are also made on how the local community and government agencies could conduct a control and sustainable management program for razor clams in Sarawak. This paper concludes with an account of the achievements and constraints faced in doing razor clam research in Sarawak.

2. Razor Clams in Sarawak

1) Distribution and economic importance of razor clams

Solen species have a wide distribution around intertidal mudflats, sandy bars and beaches in the western part of Sarawak, particularly near Kuching and Samarahan Division (Pang, 1992; Ruhana *et al.*, 2006; Rahim and Tan, 2008). Among the popular razor clamming areas are Buntal, Bako, Muara Tebas, Sambir, Sebandi, Moyan Laut, Asajaya Laut and Sampun (Fig. 1). Razor clams

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